GCCCCAGGGCCTGGAGAGGTCTGAAGAAACCTGGGAGCCAGCAGCCCGGGGCTCCACTCTGGGTTCTGAAAGCCCATTC 79 CCTGCTCTGCGGCTCCTCCCACCCCACCTCTTCTCAGCCTTGCAGCTCAAGGGTTGATCTCAGGAGTCCAGGACCCAGG 158 AGAGGGAAGAATCTGAGGAACACAGAACAGTGAGCGTTGCCCACACCCCATCTCCCGTCACCACATCTCCCCTCACCCT 237 CACCOTCCCTGCCTGGCCCTGGACCCCATCCCAAGACCTCCCTATCAGCTGACTTCTTCCAGTGTCTTGCAGGCCCCTC 316 TGGGCTCCTCCCCTGGCTTTTCCTACCACTCCCCCTCTATCGGCGTCTATCTGTAGGTGCCCTGGGATTTATAAA 395 MAGGAWG CACCACCTGGGAACATCCCCCAGACACCCCTCTTAACTCCGGGACAGAG ATG GCT GGC GGA GCC TGG GGC 543 R L A C Y L E F L K K E E L K E F Q L 27 CGC CTG GCC TGT TAC TTG GAG TTC CTG AAG AAG GAG GAG CTG AAG GAG TTC CAG CTT CTG L ANKAHSRSSGETPAQPEK 47 CTC GCC AAT AAA GCG CAC TCC AGG AGC TCT TCG GGT GAG ACA CCC GCT CAG CCA GAG AAG 663 67 T S G M E V A S Y L V A Q Y EQRAW G ACG AGT GGC ATG GAG GTG GCC TGG TAC CTG GTG GCT CAG TAT GGG GAG CAG CGG GCC TGG 723 D L A L H T W E Q M G L R S L C, A Q A Q 87 GAC CTA GCC CTC CAT ACC TGG GAG CAG ATG GGG CTG AGG TCA CTG TGC GCC CAA GCC CAG 783 E G A G H S P S F P Y S P S E P H 107 L GAA GGG GCA GGC CAC TCT CCC TCA TTC CCC TAC AGC CCA AGT GAA CCC CAC CTG GGG TCT 843 127 STAVLMPWIHEL P Ar G CCC AGC CAA CCC ACC TCC ACC GCA GTG CTA ATG CCC TGG ATC CAT GAA TTG CCG GCG GGG PSQP T 903 Q G S E R R V L R Q L P D T S G R 147 TGC ACC CAG GGC TCA GAG AGA AGG GTT TTG AGA CAG CTG CCT GAC ACA TCT GGA CGC CGC 963 W R E I S A S L L Y Q A L P S S P D H E 167 TOG AGA GAA ATC TOT GCC TOA CTC CTC TAC CAA GCT CTT COA AGC TOC CCA GAC CAT GAG 1023 S P S Q S S P N A P T S T A V L G S W G 187 TET CEA AGE CAG GAG TEA CEE AAC GEE CEE ACA TEE ACA GEA GTG CTG GGG AGE TGG GGA 1083 SPPQPSLAPREQEAPGTQ# 207 TOO COA COT CAG COO AGO CTA GOA COO AGA GAG GAG GOT COT GGG ACC CAA TGG COT 1143 DETSGIYYTEIREREKS 227 CTG GAT GAA ACG TCA GGA ATT TAC TAC ACA GAA ATC AGA GAA AGA GAG AGA GAG AAA TCA 1203 E K G R ? P W A A V V G T P P Q A H T 247 GAG AAA GGC AGG CCC CCA TGG GCA GCG GTG GTA GGA ACG CCC CCA CAG GCG CAC ACC AGC 1263 P H H H P W E P S V R E S L C S T W 267 CTA CAG CCC CAC CAC CCA TGG GAG CCT TCT GTG AGA GAG AGC CTC TGT TCC ACA TGG 1323 P W K N E D F N Q K F T Q L L L L 287 0 CCC TGG AAA AAT GAG GAT TIT AAC CAA AAA TTC ACA CAG CTG CTA CTT CTA CAA AGA CCT 1383 HPRSQDPLVKRSWFDYVEEN 307 CAC CCC AGA AGC CAA GAT CCC CTG GTC AAG AGA AGC TGG CCT GAT TAT GTG GAG GAG AAT 1443 R G H L I E I R D L F G P G L D T Q E P 327 CGA GGA CAT TTA ATT GAG ATC AGA GAC TTA TTT GGC CCA GGC CTG GAT ACC CAA GAA CCT 1503 347 CGC ATA GTC ATA CTG CAG GGG GCT GCT GGA ATT GGG AAG TCA ACA CTG GCC AGG CAG GTG 1563

FIG. 1A

KEAWSRGQLYGDRFQHVFYF AAG GAA GCC TOO GGG AGA GGC CAG CTO TAT GGG GAC CGC TTC CAG CAT GTC TTC TAC TTC 1523 S C R E L A Q S K V V S L A E L I G K D AGE TGC AGA-GAG CTG GCC CAG TCC AAG GTG GTG AGT CTC GCT GAG CTC ATC GGA AAA GAT 1683 G T A T P A P I R Q I L S R P Ε R LLF 407 GGG ACA GCC ACT CCC GCT CCC ATT AGA CAG ATC CTG TCT AGG CCA GAG CGG CTG CTC TTC 1743 I L D G <sup>7</sup> D E <sup>2</sup> G W V L Q E <sup>2</sup> S S E L C ATC CTC GAT GGT GTA GAT GAG CCA GGA TGG GTC TTG CAG GAG CCG AGT TGT GAG CTC TGT 1803 W S Q P Q P A D A L L G S L L G K T н CTG CAC TGG AGC CAG CCA CAG CCG GCG GAT GCA CTG CTG GGC AGT TTG CTG GGG AAA ACT 1863 ILPEASF LITARTTALQNLI 467 ATA CTT CCC GAG GCA TCC TTC CTG ATC ACG GCT CGG ACC ACA GCT CTG CAG AAC CTC ATT 1923 PSLEQARWVEVLGFSESS 487 CCT TCT TTG GAG CAG GCA CGT TGG GTA GAG GTC CTG GGG TTC TCT GAG TCC AGC AGG AAG 1983 EYFYRYFTDERQ I R A R 507 GAA TAT TTC TAC AGA TAT TTC ACA GAT GAA AGG CAA GCA ATT AGA GCC TTT AGG TTG GTC K S N K E L W A L C L V P W V S W L A 527 AAA TCA AAC AAA GAG CTC TGG GCC CTG TGT CTT GTG CCC TGG GTG TCC TGG CTG GCC TGC Q 0 M К RKEKLTLTSKTT ACT TGC CTG ATG CAG CAG ATG AAG CGG AAG GAA AAA CTC ACA CTG ACT TCC AAG ACC ACC 2163 С LHYLA Q A L Q A Q P ,L G P 567 ACA ACC CTC TGT CTA CAT TAC CTT GCC CAG GCT CTC CAA GCT CAG CCA TTG GGA CCC CAG 2223 L R D L C S L A A E G I W Q K K T L F S CTC AGA GAC CTC TGC TCT CTG GCT GCT GAG GGC ATC TGG CAA AAA AAG ACC CTT TTC AGT 2283 L R K H G L D G A I I S T F 607 CCA GAT GAC CTC AGG AAG CAT GGG TTA GAT GGG GCC ATC ATC TCC ACC TTC TTG AAG ATG 2343 С 627 GGT ATT CTT CAA GAG CAC CCC ATC CCT CTG AGC TAC AGC TTC ATT CAC CTC TGT TTC CAA 2403 AAMSYV L E D EKGRGKHS 647 SAG TTC TIT GCA GCA ATG TCC TAT GTC TTG GAG GAT GAG AGG GGG AGA GGT AAA CAT TCT NCIIDLEKT LEAYGIHGLFG AAT TGC ATC ATA GAT TTG GAA AAG ACG CTA GAA GCA TAT GGA ATA CAT GGC CTG TTT GGG 2523 R F L L G L L S D E G E R E M E GCA TCA ACC ACA COT TTC CTA TTG GGC CTG TTA AGT GAT GAG GGG GAG AGA GAG ATG GAG 2583 R L S 0 707 AAC ATC TIT CAC TGC CGG CTG TCT CAG GGG AGG AAC CTG ATG CAG TGG GTC CCG TCC CTG 2643 Q L L L Q P H S L E S L H C L Y E T R N 727 CAG CTG CTG CAG CCA CAC TCT CTG GAG TCC CTC CAC TGC TTG TAC GAG ACT CGG AAC 2703 K T F L T Q V M A H F EEMG 747 AAA ACG TTC CTG ACA CAA GTG ATG GCC CAT TTC GAA GAA ATG GGC ATG TGT GTA GAA ACA 2763 DMELLVCTF С IKFSRHVKKL 767 GAC ATG GAG CTC TTA GTG TGC ACT TTC TGC ATT AAA TTC AGC CGC CAC GTG AAG AAG CTT 2823 Q L I E G R Q H R S T W S P T M V V L 787 CAG CTG ATT GAG GGC AGG CAG AGA TCA ACA TGG AGC CCC ACC ATG GTA GTC CTG TTC 2883 W V P V T D A Y W Q I L F S V L

FIG. 1B

AGG TGG GTC CCA GTC ACA GAT GCC TAT TGG CAG ATT CTC TTC TCC GTC CTC AAG GTC ACC 1943 A V K S S AGA AAC CTG AAG GAG CTG GAC CTA AGT GGA AAC TCG CTG AGC CAC TCT GCA GTG AAG AGT 3003 L C K T L R R P R C L L E T L R L A G C CTT TOT ANG ACC CTG AGA CGC CCT CGC TGC CTG CAG ACC CTG CGG TTG GCT GGC TGT 3063 G L T A E D C K D L A F G L R A N Q T L GGC CTC ACA GCT GAG GAC TGC AAG GAC CTT GCC TTT GGG CTG AGA GCC AAC CAG ACC CTG 3123 ACC GAG CTG GAC CTG AGC TTC AAT GTG CTC ACG GAT GCT GGA GCC AAA CAC CTT TGC CAG 387 R L R Q P S C K L Q R L Q L V S C G L T AGA CTG AGA CAG CCG AGC TGC AAG CTA CAG CGA CTG CAG CTG GTC AGC TGT GGC CTC ACG 3243 D C C Q D L A S V L S A S P S L K E L TOT GAC TGC TGC CAG GAC CTG GCC TCT GTG CTT AGT GCC AGC CCC AGC CTG AAG GAG CTA 3303 D L Q Q N N L D D V G V R L L C E G L R GAC CTG CAG CAG AAC AAC CTG GAT GAC GTT GGC GTG CGA CTG CTG TGT GAG GGG CTG AGG 3363 L G L D Q T. T L S D E M 2 CAT CET GCC TGC AAA CTC ATA CGC CTG GGG CTG GAC CAG ACA ACT CTG AGT GAT GAG ATG 3423 Q E L R A L E Q E K P Q L L I F S R R AGG CAG GAA CTG AGG GCC CTG GAG CAG GAG AAA CCT CAG CTG CTC ATC TTC AGC AGA CGG 3483 M T P T E G L D T G E M S N S T 1007 AAA CCA AGT GTG ATG ACC CCT ACT GAG GGC CTG GAT ACG GGA GAG ATG AGT AAT AGC ACA 3543 S S L K R Q R L G S E R A A S H A Q A 1027 TCC TCA CTC AAG CGG CAG AGA CTC GGA TCA GAG AGG GCG GCT TCC CAT GTT GCT CAG GCT 3603 N L K L L D V S K I F P I A E I A AAT CTC AAA CTC CTG GAC GTG AGC AAG ATC TTC CCA ATT GCT GAG ATT GCA GAG GAA AGC 3663 EVVPVELLC PSPASQGD1067 THE CEA GAG GTA GTA COS GTG GAA CTO TTG TGC GTG COT TOT COT GCC TOT CAA GGG GAC 3723 L H T K P L G T D D F W G P T G P V A 1087 CTG CAT ACG AAG CCT TTG GGG ACT GAC GAT GAC TTC TGG GGC CCC ACG GGG CCT GTG GCT 3783 T E V V D K E K N L Y R V H F P V A G S 1107 ACT GAG GTA GTT GAC AAA GAA AAG AAC TTG TAC CGA GTT CAC TTC CCT GTA GCT GGC ICC 3843 N T G L C F V M R E A V T THE CGC TGG CCC HAC ACG GGT CTC TGC TTT GTG HTG AGA GAA GCG GTG ACC GTT GAG ATT 1903 1127 E F C V W D Q F L G E I N P Q H S W M V 1147 GAA TTC TGT GTG TGG GAC CAG TTC CTG GGT GAG ATC AAC CCA CAG CAC AGC TGG ATG GTG 1963 AGPLL DIKAEPGAV Ε A V H L P 1167 GCA GGG CCT CTG CTG GAC ATC AAG GCT GAG CCT GGA GCT GTG GAA GCT GTG CAC CTC CCT 4023 H F V A L Q G G H V D T S L F Q M A H F 1187 CAC TIT GTG GCT CTC CAA GGG GGC CAT GTG GAC ACA TCC CTG TTC CAA ATG GCC CAC TTT 4083 KPARVELHHIV L 1207 AAA GAG GAG GGG ATG CTC CTG GAG AAG CCA GCC AGG GTG GAG CTG CAT CAC ATA GTT CTG 4143 S P L G V L L K M I H N A ENPSF GAA AAC CCC AGC TTC TCC CCC TTG GGA GTC CTC CTG AAA ATG ATC CAT AAT GCC CTG CGC 4203 F I P V T S V V L L Y H R V H P E E V T 1247 TTC ATT CCC GTC ACC TCT GTG GTG TTG CTT TAC CAC CGC GTC CAT CCT GAG GAA GTC ACC 4263

FIG. 1C

F H L Y L I P S D C S I R K E L E L C Y 1267 THE CAC CHE TAC CHE ATE CEA AGT GAC THE TEE ATT CHE AAG GAA CHE GAG CHE THE TAT 4323 R S P G E D Q L F S E F Y V G H L G S G 1287 CGA AGC CCT GGA GAA GAC CAG CTG TTC TCG GAG TTC TAC GTT GGC CAC TTG GGA TCA GGG 4383 I R L Q V K D K K D E T L V W E A L V K 1307 ATC AGG CTG CAA GTG AAA GAC AAG AAA GAT GAG ACT CTG GTG TGG GAG GCC TTG GTG AAA 4443 PGDLMPATTLIPPARIAVPS 1327 CCA GGA GAT CTC ATG CCT GCA ACT ACT CTG ATC CCT CCA GCC CGC ATA GCC GTA CCT TCA 4503 PLDAPQLLHFVDQYREQLIA1347 CCT CTG GAT GCC CCG CAG TTG CTG CAC TTT GTG GAC CAG TAT CGA GAG CAG CTG ATA GCC 4563 R V T S V E V V L D K L H G Q V L S Q E 1367 CGA GTG ACA TCG GTG GAG GTT GTC TTG GAC AAA CTG CAT GGA CAG GTG CTG AGC CAG GAG 4623 2 Y E R V L A ENTRPSQMRKLFS 1387 CAG THE GAG AGG GTG CTG GCT GAG AND ACG AGG CCG AGG CAG ATG CGG AAG CTG TTC AGG 4683 LSQSWDRKCKDGLYQALKET 1407 TTG AGC CAG TCC TGG GAC CGG AAG TGC AAA GAT GGA CTC TAC CAA GCC CTG AAG GAG ACC 4743 HPHLIMELWEKGSKKGLLPL1427 CAT CCT CAC CTC ATT ATG GAA CTC TGG GAG AAG GGC AGC AAA AAG GGA CTC CTG CCA CTC 4803 AGC AGC TGA 4812 CAAGTTGCCATCTGGTTTGCCTTCCAGCACTAAAGTAATGGAACTTTGATGATGCCTTTGCTGGGCATTATGTGTCCAT 4970 GCCAGGGATGCCACAGGGGGCCCCAGTCCAGGTGGCCTAACAGCATCTCAGGGAATGTCCATCTGGAGCTGGCAAGACC 5049 AGGAATAGGAGGGACATGGAACCATTTGCCTCTGGCTGTGACACGGGTGAGCCCCCAAAATTGGGGTTCAGCGTGGGAG 5207 AAAATAAAGGAGTATCACAGCTCTTTTAGAATTTGTCTAGCAGGCTTTCCAGTTTTTACCAGAAAACCCCCTATAAATTA 5365 

FIG. 1D

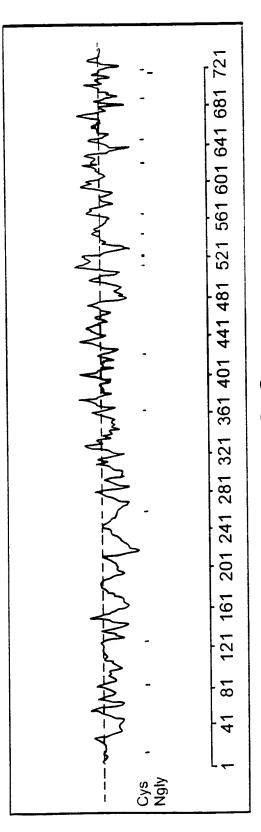


FIG. 2

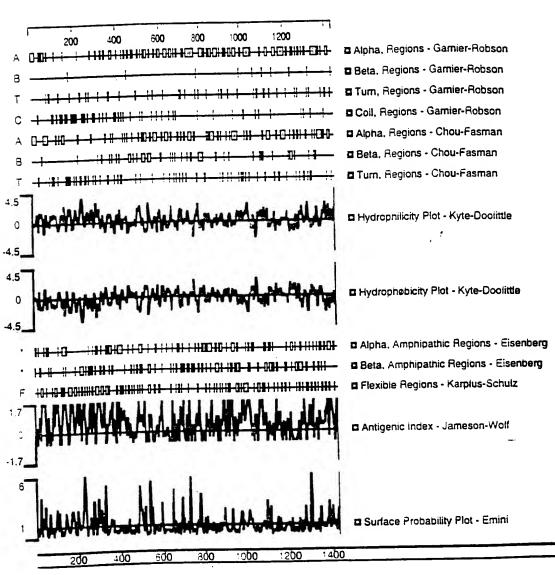


FIG. 3

TIGGTTCTCAACTTCTTTTGAAATAATGTTCATAGAGAAGGAGGGCTGTCTGAGAATCAAGGGAAACAAGCTCTCAGGA 79 CTTCCGGTCGCCATGATGGCTGTGGGCGGTAAAGGCGGTTAGTGCAAGCATCTGGGCCATCTTCAATGGTAAAAAAGAT 158 ACAGTAAAGACATAAATACCACATTTTGACAAATGGAAAAAGGAGTGTCCAGAAAAGAGTAGCAGCAGTGAGGAAGAG 237  $\verb|CTGCCGAGACGGGTATACAGGGAGCTACCCTGTGTTTCTGAGACCCTTTGTGACATCTCACATTTTTTCCAAGAAG|\\$ M M R Q R Q S H Y C S V L F L S V N Y L 20 ATG ATG AGA CAG AGG CAG AGC CAT TAT TGT TCC GTG CTG TTC CTG AGT GTC AAC TAT CTG G T F P G D I C S E E N Q I V S S Y A 40 GGG GGG ACA TTC CCA GGA GAC ATT TGC TCA GAA GAG AAT CAA ATA GTT TCC TCT TAT GCT 433 ĸ v С FEIEED Y K N R 60 Q TCT AAA GTC TGT TTT GAG ATC GAA GAA GAT TAT AAA AAT CGT CAG TTT CTG GGG CCT GAA 493 D V E L I D K S T N R Y S 80 G N GGA AAT GTG GAT GTT GAG TTG ATT GAT AAG AGC ACA AAC AGA TAC AGC GTT TGG TTC CCC 553 T A G W Y L W S A T G L G F L V R D E V 100 ACT GCT GGC TGG TAT CTG TGG TCA GCC ACA GGC CTC GGC TTC CTG GTA AGG GAT GAG GTC A F G S W 0 H 120 ACA GTG ACG ATT GCG TITT GGT TOO TGG AGT CAG CAC CTG GCC CTG GAC CTG CAG CAC CAT 673 EQWLVGGPLFDVTAEPEEAV GAA CAG TGG CTG GTG GGC GGC CCC TTG TTT GAT GTC ACT GCA GAG CCA GAG, GAG GCT GTC L P H F I S L Q G E V D V S W F 160 A E I H GCC GAA ATC CAC CTC CCC CAC TTC ATC TCC CTC CAA GGT GAG GTG GAC GTC TCC TGG TTT 793 LVAHFKNEGMVLEHPARVEP 180 CTC GTT GCC CAT TIT AAG AAT GAA GGG ATG GTC CTG GAG CAT CCA GCC CGG GTG GAG CCT 853 Y A V LESPSF SLMGILLR 200 THE TAT GET GTG GTA AGG CCC AGG TTC TCT CTG ATG GGC ATC CTG CTG CGG ATC GCC SGTRLSIPITSNTLIYYHPH 220 AGT GGG ACT CGC CTC TCC ATC CCC ATC ACT TCC AAC ACA TTG ATC TAT TAT CAC CCC CAC I K F H L Y L V P S D A L L T K A 240 CCC GAA GAT ATT AAG TTC CAC TTG TAC CTT GTC CCC AGC GAC GCC TTG CTA ACA AAG GCG 1033 I D D Ε E D R F H G V R L Q T S P P M £ 260 ATA GAT GAT GAG GAA GAT CGC TTC CAT GGT GTG CGC CTG CAG ACT TCG CCC CCA ATG GAA 1093 S S Y I V G S N SANLKV N М CCC CTG AAC TTT GGT TCC AGT TAT ATT GTG TCT AAT TCT GCT AAC CTG AAA GTA ATG CCC 1153 300 K L S Y R S P G E I Q H F S K F L AAG GAG TTG AAA TTG TCC TAC AGG AGC CCT GGA GAA ATT CAG CAC TTC TCA AAA TTC TAT 1213 M K E P I Q L E I T E K R H G T L 320 GCT GGG CAG ATG AAG GAA CCC ATT CAA CTT GAG ATT ACT GAA AAA AGA CAT GGG ACT TTG 1273 EVKPV DLQLV AASA 340 D GTG TGG GAT ACT GAG GTG AAG CCA GTG GAT CTC CAG CTT GTA GCT GCA TCA GCC CCT CCT 1333 360 P F S G A A F V K E N H R Q L Q A R M CCT TTC TCA GGT GCA GCC TTT GTG AAG GAG AAC CAC CGG CAA CTC CAA GCC AGG ATG GGG 1393 VLDDLQ D N E V 380 E N GAC CTG AAA GGG GTG CTC GAT GAT CTC CAG GAC AAT GAG GTT CTT ACT GAG AAT GAG AAG 1453 E L V E Q E K T R Q S K N E A L L S M V 400

FIG. 4A

GAG CTG GTG GAG CAG GAA AAG ACA CGG CAG AGC AAG AAT GAG GCC TTG CTG AGC ATG GTG 1513 E K K G D L A L D V L F R S I S E R D P 420 GAG AAG AAA GGG GAC CTG GCC CTG GAC GTG CTC TTC AGA AGC ATT AGT GAA AGG GAC CCT 1573 Y L V S Y L R. Q Q N L 432 TAC CTC GTG TCC TAT CTT AGA CAG CAG AAT TTG TAA 1609 AATGAGTCAGTTAGGTAGTCTGGAAGAGAGAATCCAGCGTTCTCATTGGAAATGGATAAACAGAAATGTGATCATTGAT 1688 TTCAGTGTTCAAGACAGAAGAAGACTGGGTAACATCTATCACACAGGCTTTCAGGACAGACTTGTAACCTGGCATGTAC 1767 CTATTGACTGTATCCTCATGCATTTTCCTCAAGAATGTCTGAAGAAGGTAGTAATATTCCTTTTAAATTTTTTCCAACC 1846 ATTGCTTGATATATCACTATTTTATCCATTGACATGATTCTTGAAGACCCAGGATAAAGGACATCCGGATAGGTGTGTT 1925 TATGAAGGATGGGGCCTGGAAAGGCAACTTTTCCTGATTAATGTGAAAAATAATTCCTATGGACACTCCGTTTGAAGTA 2004 TCRCCTTCTCATAACTAAAAGCAGAAAAGCTAACAAAAGCTTCTCAGCTGAGGACACTCAAGGCATACATGATGACAGT 2083 AAAGAGAGCACAAAAATGGGAGAAAATGCAAACATGAGGAGAAAATATTTTCCCACTGGTGTTAGCCTGCTACAAGGA 2241 GTTGTTGGGTTAAATGTTCATGGTCAACTCCAAGGAATACTGAGATGAAATGTGGTAAATCAACTACCACAGAACCACCA 2320 ARRAGARATGAGGGTARTCAGCTTATTCTGAGACAGACATTCTTGGCARTGTACCATACRARAAATRAGCCAACTCT 2399 GACATTTGGATTCTACCATAGACTCTGTCATTTTGTAGCCATTTCAGCTGTCTTTTGATTAATGTTTTCGTGGCACACA 2478 TAGGATTTATCCTCAGTCAGCCAGTTTGTTATGTCTTTTCTATTCTACTGTTATCACATTTGTACCACTTAAAGTGGAA 2715 TCTAGGCACTITATCACCATTTAGATCCTATTACCTTTTCTCATCTAGGATATAGTTATCTTCTACATAATCTTTCTGT 2794 ATCTTAAAACCCATCAATAAATTATTATTATTTTCTACTTTTAATCACTCAGAAGATTTAAAAAACTCATGAGAAGAG 2873 TCCACTTCTTCTGATAGACGTTTTTTAGTTCTTTTAGAGTGGTTCTGATAGGTACAGATTCTCTTATTTTTTGCTACCT 3031 CTGAGGACATCITTTTCTCACCTTCATTCTCAGTGATGTTTTTTGCTTGAGTATTTTTTAGTTGACATTGTTTTCTGTT 3110 TGTCATTTTTCTGTCAGATTTCAAGGTATTTATCTTTAGCTCATTTCATTATGTTGGGGATGAGTTTCCTTGT 3268 TTTATTCCCTTTGGAATTTGCTCCAATTCATAAATTTGCAGTTTTATGTCTTTTTACCAAACTTAGAGGTTTTCAGCCTA 3347 ATTTCTARABATACTTTTATTAGCCTGATTTTCATCTTTATAGGAAATAGTTTAAGTGATGACAAGTTCCAATAGCTT 3426 CTGTAAAATTCATATGCTTTGCTACTCTAAACCTAGTTTGAAATCAACAGTCTTGAGAATAGATGAAAATTTTGATGAA 3584 TAGTGGAATTCTTTTAAATGGAAACCTCTTACATGTGATTTTCCTTGCCATCTAGAAATAAACCATAGTATTTATGTTG 3663 AATCAATCAATATTATATTTTGTTTTTTTCCCCCCTCTTCTGAGACTCTTATTGTGGAAATGTTAGACTTTTATGTTTTC 3742 CTANATGTCCCTGATATTCTACTTATTTAGAACATCTTTTCATTTTTCCATTATTCTGATTGGGTAATTTTAATTTGT 3821 CTATTTTCAAATTTGCTGGAGTGTTCACCTGTTGTTGTTGTCGTCCCACTGAGTGCATTCACCACCTTTTAAATTT 3900 TGGTCACTGTATGTATCAGTTCTAAAATTTCCATTTTGTTCTCTATATTTTAAATTTCTTGGCTTATATTCTATTTTCC 3979

FIG. 4B

TGCAAATGTGTCAGCATTTGCTTGTTTGAGCTTTTTTTTT	4058
GCAGTGGTGGGATCTCAGCTCACTGCAACCTCTGCCTCCTGGTTCAAGCGATTATTGTGCCTCAGCCTCCTGAGTAGCT	4137
GGGATTACAGGCATGCACCACCACCAGCCAGCTAATTTTTTGTATTTTTAGTAGAGACAGAGTTTTGCTATGTTGGCCA	4216
GGCTGGTTTTGAACTCCTGGCCTCAAGTGATCCACCCACC	4295
${\tt TGGCACATTTGAGTATTTTTTTTTTTTTTTTTTGAGATGGAGTCTCGCTCTGTCATCTAGGCTGGAGTGCAGTGG}$	4374
${\tt TGTGATCTCAGCTCACTGCAGCCTCTGTCTCCCGGGGCTCAAGCGATTCTCTTGCCTCAGCCTCCTGAGTAGCTAGGACT}$	4453
${\tt ACAGGTGCATGCCAACACGCCCGGCTAATTTTTTAAAAAATATTTTTAGTAGAGACAGGGTTTCACCATTTTGGCCAG$	4532
GATGGTCTCGATCTCCTGACCTCATGATCCACCCGCCTCGGCCTTCCAAAGTGCTGGGATTACAGGCATGAGCCACCGT	4611
${\tt GCCTGGCCTCATTTGAGTATTTTTATAATGTCTCTTTTAAAGTCTTTGTCAGATAATTCCACTGTACATGTTATTCAGT$	4690
${\tt GTTTGGTGTCCACTGAGTTGTCATTTGCCAGACAAGTGGAGATTTTTGCAGCTCATCCTTGTATTCTCAGTAGTTCCGA}$	4769
${\tt TATGTACCCTCGACATGTGAATGTTATCTTATGAGACTCTGTTTTATTTGTATCCAACAGAAGATGTTTATTATTTAT$	4848
TGGCTTTCTGTGAACTGAGGTCTTAATATCAGCTCATTTTAAAAGTCTTTGCAGTGGTATTCGGATCTATCCTGTGTGT	4927
GCCTATGAGATTGGGTGCAGTGTATCCTGTTAGCTCCATTCTCAGGGCGTTTGAATGTGAATTAGGACCAGCGCAATGA	5006
ATGCTCAAGTTGGGGGTTGGGCGTTAGAATTCATAAAAGTCTTTATATGCTCAG	5059

FIG. 4C

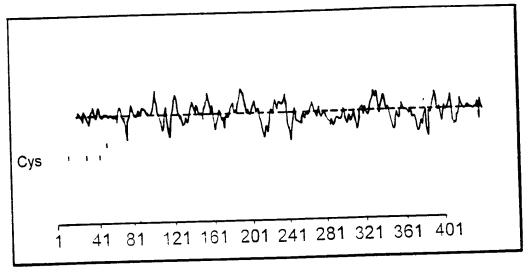


FIG. 5

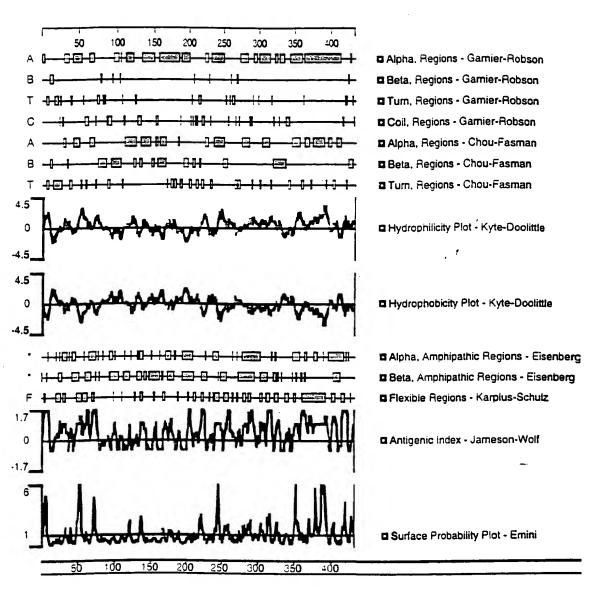


FIG. 6

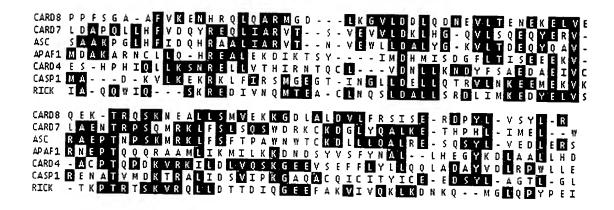


Fig. 7

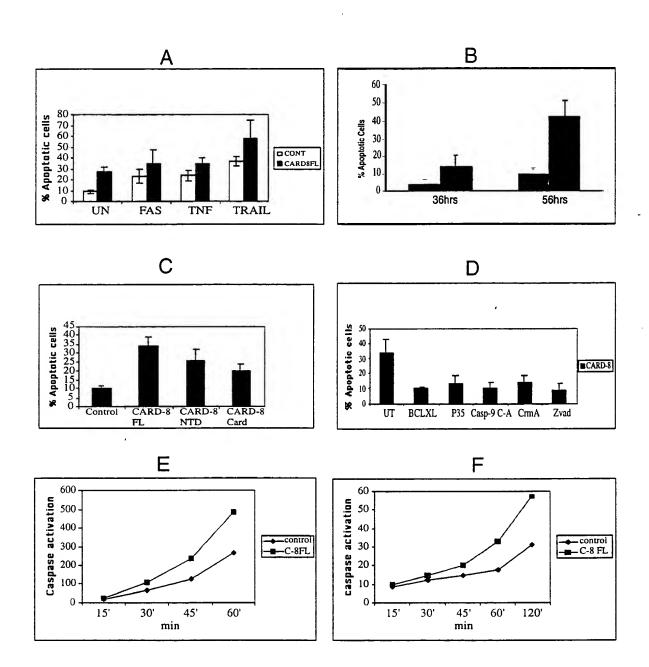


Fig. 8

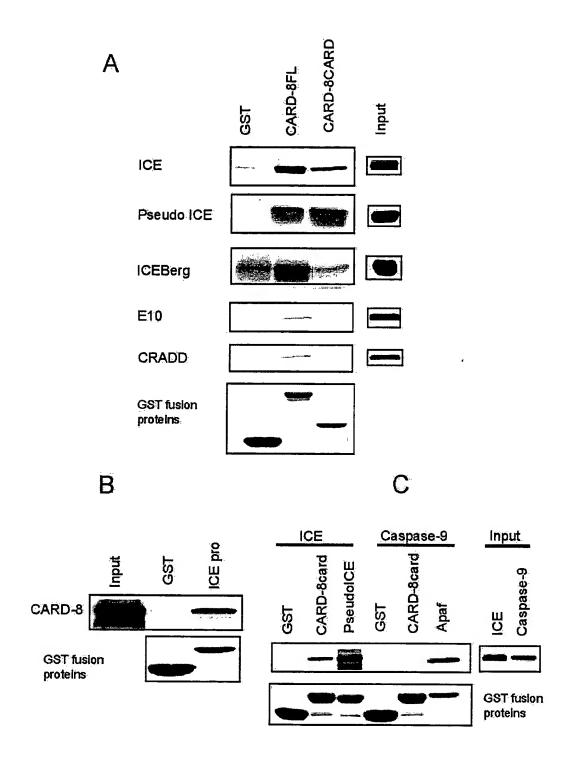
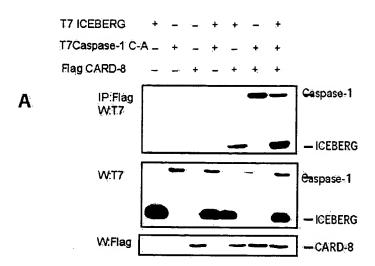


Fig. 9



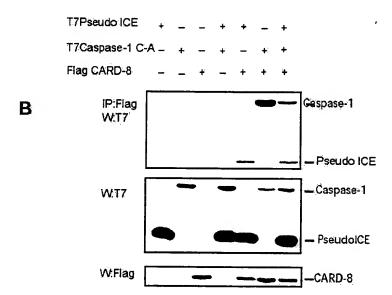
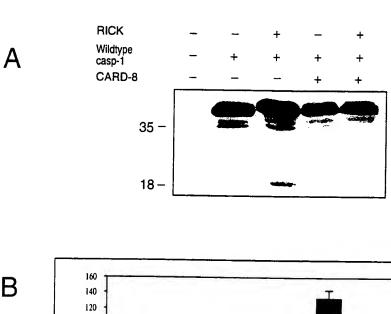
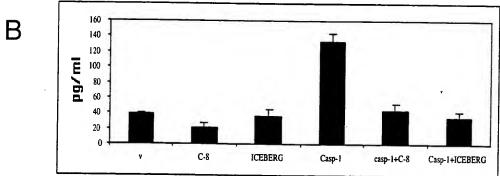


Fig. 10





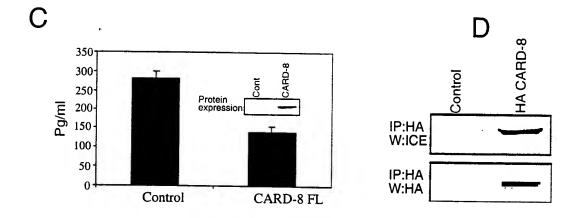


Fig. 11